

3D PRINTED PURE TUNGSTEN PARTS

# PRINTED TUNGSTEN: WHEN APPLICATIONS GET EXTREME

We are a leading manufacturer capable of controlled processing pure tungsten via the additive manufacturing technique Powder Bed Laser Melting. This novel and **unique 3D printing technology** offers greater freedom in design and allows custom-made, highly complex shaped parts to be manufactured from pure tungsten.



## KEY BENEFITS

### Harnesses the most extreme characteristics

- High melting point of 3.422 °C
- High density of 19.2 g/cm<sup>3</sup>

### Superb accuracy

- Small feature size of 100 µm
- Positional accuracy of 25 µm

### Hands-on design support

- In-house 3D technical experts
- Breakthrough for freedom in design

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## LEADING TUNGSTEN PROCESSING CAPABILITIES

### INNOVATIVE MANUFACTURING TECHNOLOGY

The Powder Bed Laser Melting process uses a high power-density laser to melt and fuse tungsten powder together.

### OUR STRENGTHS

- 100% quality control
- Pioneer in printing tungsten in high volumes

### PROCESSING FEATURES:

- Maximum product size 230x230x200mm
- Positional accuracy of 25 µm
- Small feature size of 100 µm
- High aspect ratios (1:300) possible
- Made of 100% pure tungsten
- Patented post-processing capabilities

## TUNGSTEN: FIRST CHOICE FOR DIVERSE APPLICATIONS



### COLLIMATION SOLUTIONS AND BEAM SHAPING

Due to its excellent ionizing radiation absorption characteristics, pure tungsten is the preferred metal for collimation and beam shaping solutions in the medical and nuclear energy industries.



### NON-MAGNETIC PARTS

Pure tungsten is a non-magnetic metal and used in medical MRI (magnetic resonance imaging) and the leisure industries.



### BALANCE WEIGHTS

Thanks to its density and weight, pure tungsten is often used as a balance weight in, for example, the aerospace, defense, leisure, optical and automotive industries.



### THERMAL AND RADIATION SHIELDING SOLUTIONS

Pure tungsten has a high melting point and is therefore often used for thermal or radiation shielding in the medical and nuclear energy industries.

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